

AMENDMENTS TO THE CLAIMS:

Please amend claim 1 as follows.

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A switchable coupler comprising:-

a first optical waveguide defining an inlet port for a first unpolarised light input and a first outlet port,

a second optical waveguide defining an inlet port for a second unpolarised light input and a second outlet port,

a polarisation splitter device positioned between said waveguides to split each of said first unpolarised light input and said second unpolarised light input into refracted and reflected polarised components,

the waveguides being arranged, in the absence of activated first and second electro-optical switches, to transmit said refracted and reflected polarised components of said first light input by total internal reflection in the direction of said first outlet port, and the refracted and reflected polarised components of said second light input by total internal reflection in the direction of said second outlet port,

a first electro-optical switch positioned in the paths of said refracted and reflected polarised components of said first light input, said first electro-optical switch for recombining said refracted and reflected polarised components of said first light input and, when activated, to switch these combined components towards said second outlet port, and

a second electro-optical switch, positioned in the paths of said refracted and reflected polarised components of said second light input, for recombining said refracted and reflected polarised components of said second light input and, when activated, to switch these combined components to said first outlet port.

2. (previously presented) A switchable coupler, as in Claim 1, in which said polarisation splitter device includes liquid crystal positioned between said waveguides.

3. (previously presented) A switchable coupler, as in Claim 2, in which said liquid crystal material defines two separate cells, one of said liquid crystal cells serving to split said first unpolarised light input, and the other of said liquid crystal cell serving to split said second unpolarised light input.

4. (previously presented) A switchable coupler, as in Claim 1, in which at least one of said electro-optical switches includes liquid crystal positioned between said waveguides, and an electric field device is provided to generate an electric field across said liquid crystal to operate the electro-optical switch.

5. (previously presented) A switchable coupler, as in Claim 4, in which said liquid crystal material defines two separate cells, and one of these liquid crystal cells forms part of each said electro-optical switch.

6. (previously presented) A method of coupling first and second inputs of unpolarised light comprising:-

splitting each of said first and second inputs into respective refracted and reflected polarised components,

transmitting said refracted and reflected components of said first input to a first electro-optical switch for recombining said refracted and reflected components of said first input and to switch the recombined output from a first outlet to a second outlet,

transmitting said refracted and reflected components of said second input to a second electro-optical switch for recombining said refracted and reflected components of said second input and to switch said recombined output from said second outlet to said first outlet, and

selecting the operation of said first and second electro-optical switches to couple said first and second inputs into an outlet from the group comprising said first outlet and said second outlet.